



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.: 10/763,514
Filing Date: January 22, 2004
Applicant: Susan G. Yan et al.
Group Art Unit: 1745
Examiner: Ben Lewis
Title: DURABLE MEMBRANE ELECTRODE ASSEMBLY
CATALYST COATED DIFFUSION MEDIA WITH NO
LAMINATION TO MEMBRANE
Attorney Docket: GP-303570

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RESPONSE TO FINAL OFFICE ACTION

This is a Response to the Final Office Action mailed November 1, 2006, to which a response is due by February 1, 2007. Claims 15-18 remain pending in this application. These claims stand rejected under 35 USC §112, first paragraph, as not being enabling, and under 35 USC §103(a) as being unpatentable over Yen et al. in view of Fan et al.

In view of the following remarks, these rejections are traversed, and reconsideration of this application is respectfully requested.

Applicant respectfully submits that the Final Office Action is premature and should be withdrawn. MPEP 706.07(a) states, "[t]he second or any subsequent actions on the merits shall be final, except where the Examiner introduces a new ground of rejection that is neither necessitated by Applicant's amendment of the claims nor based on information submitted in an Information Disclosure Statement . . ." In Applicant's previous Response filed August 8, 2006, Applicant did not amend the claims. Further, no Information Disclosure Statement has been filed. Therefore, Applicant submits that the Final Office

Action should be withdrawn because the §112, first paragraph, rejection is a new rejection that is not necessitated by Applicant's amendment of the claims nor based on information submitted in an Information Disclosure Statement.

Notwithstanding the foregoing, Applicant respectfully submits that the claims 15-18 do satisfy the enablement requirement of §112, first paragraph. It appears to be the Examiner's position that a fuel cell where the diffusion media and membrane are not bonded prior to operation of the fuel cell would cause the fuel cell to be inoperable.

MPEP 2164 states, "[t]hat in order to satisfy the enablement requirement of §112, first paragraph, the specification must describe to one skilled in the art how to make and use the invention." MPEP 2164.03 gives the test for enablement, particularly, that the specification must describe to one of skill in the art how to make and use the invention without undue experimentation.

Independent claim 15 is directed to a method for making an MEA for a fuel cell. One of ordinary skill in the art would understand that the fuel cell is an assembly of components, such as flow field plates, membrane, diffusion media layers, spacers, etc. One of ordinary skill in the art would also understand that typically a fuel cell is part of a fuel cell stack that includes bipolar plates separating the fuel cells, end plates, flow manifolds, etc. One of ordinary skill in the art would also understand that various techniques are known in the art to hold the several layers of the fuel cell and/or fuel cell stack together around their edges, such as frames, gaskets, etc.

Therefore, Applicant submits that it would not matter whether the diffusion media layers are bonded to the membrane or not prior to operation of the fuel cell, because the edges of the diffusion media layers and membrane would be held together by a frame or gasket assembly that held the entire fuel cell or fuel cell stack together. Thus, Applicant respectfully submits that the specification is enabled because one of ordinary skill in the art would recognize how the diffusion media layers and the membranes are held together

prior to operation of the fuel cell that then causes them to be bonded as Applicant has previously discussed. It is therefore respectfully requested that the §112, first paragraph, rejection be withdrawn.

Applicant has previously argued that neither Yen et al. nor Fan et al teach or suggest depositing a catalyst layer on a diffusion media layer, spraying an ionomer layer on the catalyst layer and then forming the diffusion media layer including the catalyst to a membrane through the operation of the fuel cell, and therefore the Examiner has not established a prima facie case of obviousness. It appears that the Examiner agrees with this position as the Examiner has not provided any specific teaching in either of these two references of the combination of these steps. Therefore, it is respectfully requested that the §103(a) rejection be withdrawn.

It is now believed that this application is in condition for allowance. If the Examiner believes that personal contact with Applicant's representative would expedite prosecution of this application, he is invited to call the undersigned at his convenience.

Applicant is filing concurrently herewith, a Power of Attorney to Prosecute Applications before the USPTO (appointing practitioners associated with the Customer No. 65798 Power of Attorney and changing the Correspondence Address as associated with Customer No. 65798 as identified below) along with a Statement under 37 CFR 3.73(b).

Respectfully submitted,

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